

ANNA UNIVERSITY
COLLEGE OF ENGINEERING,
GUINDY

IBM: ASSIGNMENT - 1

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First Question - PYTHON LIST OPERATIONS

Source Code:

```
number_of_commands = int(input())  
  
my_list = []  
  
for i in range(0, number_of_commands):  
  
    user_input = input().split()
```

```
if user_input[0] == "insert":  
  
    my_list.insert(int(user_input[1]), int(user_input[2]))  
  
elif user_input[0] == "append":  
  
    my_list.append(int(user_input[1]))  
  
elif user_input[0] == "pop":  
  
    my_list.pop()  
  
elif user_input[0] == "print":  
  
    print(my_list)  
  
elif user_input[0] == "remove":  
  
    my_list.remove(int(user_input[1]))  
  
elif user_input[0] == "sort":  
  
    my_list.sort()  
  
else:  
  
    my_list.reverse()
```

OUTPUT

Calculator.py

SOURCE CODE

```
# Define the function to add two numbers

def add(x, y):

    return x + y


# Define the function to subtract two numbers

def subtract(x, y):

    return x - y


# Define the function to multiply two numbers

def multiply(x, y):

    return x * y


# Define the function to divide two numbers

def divide(x, y):

    return x / y


# Main driver code to execute above functions
```

```
print("Select operation.")

print("1.Add")

print("2.Subtract")

print("3.Multiply")

print("4.Divide")


# Take input from the user

choice = input("Enter choice(1/2/3/4): ")


# Check if choice is one of the four options

if choice in ('1', '2', '3', '4', '5', '6', '7'):

    num1 = float(input("Enter first number: "))

    num2 = float(input("Enter second number: "))

    if choice == '1':

        print(num1, "+", num2, "=", add(num1, num2))

    elif choice == '2':

        print(num1, "-", num2, "=", subtract(num1, num2))

    elif choice == '3':
```

```
    print(num1, "*", num2, "=", multiply(num1, num2))

elif choice == '4':

    print(num1, "/", num2, "=", divide(num1, num2))

else:

    print("Invalid Input")
```

OUTPUT

Third Question – String Operations

```
# Program to concatenate, reverse and slice strings

# Concatenate strings

# Input two strings

str1 = input("Enter first string: ")

str2 = input("Enter second string: ")
```

```
# Concatenate strings

str3 = str1 + str2

# Print concatenated string

print("Concatenated string: ", str3)


# Reverse string

# Input string

str1 = input("Enter string: ")

# Reverse string

str2 = str1[::-1]

# Print reversed string

print("Reversed string: ", str2)


# Slice string

# Input string

str1 = input("Enter string: ")

# Input start and end index

start = int(input("Enter start index: "))

end = int(input("Enter end index: "))
```

```
# Slice string

str2 = str1[start:end]

# Print sliced string

print("Sliced string: ", str2)
```

OUTPUT

Why is Python a popular programming language?

Python is easy to learn

Python has an active, supportive community

Python is flexible

Python offers versatile web-development solutions

Python is well suited to data science and analytics

Python is efficient, fast, and reliable

Python is widely used with IoT Technology

Python empowers custom automation

Python is the academic language

What are the other Frameworks that can be used with python?

- AIOHTTP
- Bottle
- CherryPy
- CubicWeb
- Dash
- Django
- Falcon
- Giotto
- Flask

Full form of WSGI?

The Web Server Gateway Interface. It is pronounced whiskey or WIZ-ghee, is a simple calling convention for web servers to forward requests to web applications or frameworks written in the Python programming language.